

11.8

<b>Notice of Allowability</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/717,080	LIEBERMAN ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Arnel C. Lavarias	2872	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 8/3/05.
2. ☒ The allowed claim(s) is/are 7-8, 19-27 (renumbered 1-11).
3. ☒ The drawings filed on 11/10/04, 11/19/03 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All    b) ☐ Some\*    c) ☐ None    of the:
  1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

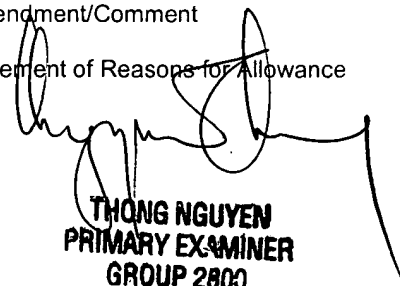
\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  6. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
    - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
    - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

- |   |  |
|---|--|
| <ol style="list-style-type: none"> <li>1. <input type="checkbox"/> Notice of References Cited (PTO-892)</li> <li>2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)</li> <li>3. <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),<br/>Paper No./Mail Date _____</li> <li>4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit<br/>of Biological Material</li> </ol> | <ol style="list-style-type: none"> <li>5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)</li> <li>6. <input type="checkbox"/> Interview Summary (PTO-413),<br/>Paper No./Mail Date _____</li> <li>7. <input type="checkbox"/> Examiner's Amendment/Comment</li> <li>8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance</li> <li>9. <input type="checkbox"/> Other _____</li> </ol> |
|---|--|

  
**THONG NGUYEN**  
**PRIMARY EXAMINER**  
**GROUP 2800**

## **DETAILED ACTION**

### ***Response to Amendment***

1. The amendments to Claims 7-8, 19-20 in the submission dated 8/3/05 are acknowledged and accepted.
2. The cancellation of Claims 1-6, 17-18 in the submission dated 8/3/05 is acknowledged and accepted.
3. In view of the amendments above, the rejections of Claims 1-6, 17-18 in Sections 8-10 of the Office Action dated 2/4/05 are respectfully withdrawn.

### ***Allowable Subject Matter***

4. Claims 7-8, 19-27 are allowed.

## **REASONS FOR ALLOWANCE**

5. The following is an examiner's statement of reasons for allowance:

Claim 7 is allowable over the cited art of record for at least the reason that the cited art of record fails to teach or reasonably suggest an optical fiber having at least one parameter that varies from an input end to an output thereof in a manner to maintain constant power loss per unit length over the length of the fiber, as generally set forth in Claim 7, and further wherein the one parameter comprises the core/cladding refractive index ratio.

Claim 8 is allowable over the cited art of record for at least the reason that the cited art of record fails to teach or reasonably suggest an optical fiber having at least one parameter that varies from an input end to an output thereof in a manner to maintain constant power loss per unit length over the length of the fiber, as generally set forth in Claim 8, and further wherein the one parameter comprises an increase in the absorption coefficient of the fiber from the input end to the output end.

Claim 19 is allowable over the cited art of record for at least the reason that the cited art of record fails to teach or reasonably suggest an optical fiber having at least one parameter that varies from an input end to an output end in a way calculated to make the power loss vary in a controlled way over the length of the fiber, as generally set forth in Claim 19, and further wherein the one parameter comprises the core/cladding refractive index ratio.

Claim 20 is allowable over the cited art of record for at least the reason that the cited art of record fails to teach or reasonably suggest an optical fiber having at least one parameter that varies from an input end to an output end in a way calculated to make the power loss vary in a controlled way over the length of the fiber, as generally set forth in Claim 20, and further wherein the one parameter comprises an increase in the scattering coefficient of the fiber from the input end to the output end.

Claim 21 is allowable over the cited art of record for at least the reason that the cited art of record fails to teach or reasonably suggest a distributed fiber optic sensor comprising a multi-mode fiber, as generally set forth in Claim 21, the fiber including at least one parameter that varies as a function of position within the fiber to compensate for

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any non-linear power loss over the length of the fiber. Claims 22-27 are dependent on Claim 21, and hence are allowable for at least the same reasons Claim 21 is allowable.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Arnel C. Lavarias whose telephone number is 571-272-2315. The examiner can normally be reached on M-F 9:30 AM - 6 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Drew Dunn can be reached on 571-272-2312. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Arnel C. Lavarias  
8/10/05



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